

Date: \_\_\_\_\_

## Grade 7: Math

### 1.9: Fractions, Decimal and Percents

- List the occasions in real life where you may heard the word percent or seen the symbol %
- What does percent mean?

Percent = Per + cent

- Definition:
- Percents  $\rightarrow$  Fractions
  - To write a percent as a fraction, write the percent with a denominator 100. Then reduce the fraction.

Example:  $15\% = \frac{15}{100}$

$$= \frac{3}{20}$$

- Convert the percents to fractions. [Use a separate piece of paper]

- |        |        |            |         |
|--------|--------|------------|---------|
| a. 11% | g. 25% | m. 125%    | s. 13%  |
| b. 3%  | h. 36% | n. 87.5%   | t. 24%  |
| c. 4%  | i. 45% | o. 19%     | u. 0.2% |
| d. 7%  | j. 20% | p. 117%    | v. 90%  |
| e. 28% | k. 78% | q. 150%    | w. 45%  |
|        |        |            | .       |
| f. 54% | l. 5%  | r. 100000% | x. 66%  |

- Textbook problem #1 page 294

- Fractions  $\rightarrow$  Percents (Special denominators)
  - Make equivalent fractions out of a 100.
  - Example: Write  $\frac{14}{25}$  as a percent.

$$\frac{14}{25} = \frac{56}{100}$$

- Convert the fractions to percents. [Use a separate piece of paper]

a.  $\frac{4}{25}$

c.  $2\frac{1}{2}$

e.  $\frac{23}{25}$

g.  $1\frac{13}{50}$

b.  $\frac{4}{5}$

d.  $\frac{3}{50}$

f.  $\frac{17}{20}$

h.  $\frac{19}{25}$

- Fractions  $\rightarrow$  Percents (All denominators)
  - Multiply the fraction with 100.
  - Long divide. (You may end up with a decimal answer)
  - Put the % symbol at the end.
  - Example: Write  $\frac{2}{3}$  as a percent.
  - Answer:  $\frac{2}{3} \times 100 = \frac{200}{3}$   
 $= 66.67\%$

- Convert the fractions to percents . [Use a separate piece of paper]

a. $\frac{4}{25}$	c. $2\frac{1}{2}$	e. $\frac{23}{25}$	g. $1\frac{13}{50}$
b. $\frac{4}{5}$	d. $\frac{3}{50}$	f. $\frac{17}{20}$	h. $\frac{19}{25}$

- Decimals  $\rightarrow$  Percents

- Multiply the number by 100.
- Put the symbol % at the end.

- Convert these decimals to percents

a. 0.31	g. 2.5	m. 1.75	s. 13.0
b. 0.83	h. 0.36	n. 47.5	t. 0.24
c. 0.994	i. 0.045	o. 0.019	u. 0.0452
d. 0.07	j. 0.2	p. 17.1	v. 0.009
e. 2.8	k. 78.0	q. 0.15	w. 4.55
f. 0.04	l. 5.0	r. 0.001	x. 1.066

- Homework: Textbook page 294, #2 (convert the fractions to percents only), 3, 4, 8 and complete worksheet 2.1.